



RAILROAD COMMISSION OF TEXAS

OFFICE OF GENERAL COUNSEL

OIL AND GAS DOCKET NO. 03-0263209

**THE APPLICATION OF TRAVIS L. BISHOP TO CONSIDER COMMERCIAL DISPOSAL
AUTHORITY ON ITS CHAMPION LEASE WELL NO. 1D, SPLENDORA, E. (6230
YEGUA) FIELD, MONTGOMERY COUNTY, TEXAS**

Heard By: Donna K. Chandler, Technical Examiner
Marshall F. Enquist, Hearings Examiner

Appearances:

Representing:

APPLICANT:

George Neale
Travis Bishop
Richard Johnston
Kelly Parma

REPRESENTING:

Travis L. Bishop

PROTESTANTS:

Malvin Nezat

Himself

William Smith

Montgomery Co. Commissioner Pct. 4

Robert Schmidt

City of Splendora

Procedural History of Case:

Application Filed:	August 25, 2009
Request for Hearing:	September 11, 2009
Notice of Hearing:	October 15, 2009
Hearing Held:	November 12, 2009
Record Closed:	November 26, 2009
Proposal for Decision Issued:	December 3, 2009

EXAMINERS' REPORT AND PROPOSAL FOR DECISION**STATEMENT OF THE CASE**

Travis L. Bishop ("Bishop") requests commercial disposal authority pursuant to Statewide Rule 9 for its Champion No. 1D in Montgomery County. In the initial application, Bishop requested authority to dispose of a maximum of 5,000 barrels of water per day (BWPD). At the close of the hearing, Bishop amended his request to dispose of a maximum of 3,000 BWPD.

This application is protested by the City of Splendora, the Montgomery County Commissioner of Precinct 4 and Malvin Nezat, a resident of Hayden Road, which is the road leading to the disposal well. Numerous other letters of protest are in the hearing file.

DISCUSSION OF THE EVIDENCE**Applicant's Evidence**

On August 8, 1985, Sue Ann Oil & Gas Company was issued a permit to dispose of a maximum of 500 BWPD in the Champion No. 1D between 2,900 and 3,000 feet, with a maximum surface injection pressure of 500 psig. On July 5, 1993, the permit was amended to increase the volume to 1,000 BWPD and the maximum surface injection pressure to 1,250 psig.

Bishop purchased 345 acres on which the Champion No. 1D is located about 3 years ago and took over operations of the well in early 2009. The acreage is not within the city limits of the City of Splendora, but is within the city's ETJ. The Champion No. 1D has not been used for disposal for several years.

The Champion No. 1D was drilled in 1957 to a total depth of 10,700 feet and initially produced from a depth of approximately 7,050 feet. The well has 1,987 feet of 9 5/8" surface casing cemented to surface and 5 1/2" casing set to 7,221 feet. When the well was converted to a disposal well, a cement squeeze was performed above the disposal interval at 2,900 feet, and below the disposal interval at 3,026 feet. The production casing was also perforated at 2,060 feet and cement was squeezed at that depth. A cement plug is set at 3,020 feet to isolate the lower portion of the wellbore. The current perforated disposal interval is from 2,940 feet to 2,950 feet and a packer is set at 2,915 feet on 2 3/8" tubing. (See attached wellbore diagram.)

Usable quality ground water occurs to a depth of approximately 2,350 feet according to the Texas Commission on Environmental Quality. There is approximately 300 feet of usable quality water behind uncemented pipe. Bishop agreed to run a cement bond log in the well prior to disposal to insure that there is adequate cement above the disposal interval to confine injected fluids to the disposal interval. A log of the well demonstrates that there is

approximately 170 feet of continuous shale just above the disposal interval which will prevent vertical migration of fluids out of the disposal interval.

Initially, Bishop requested authority to dispose of a maximum of 5,000 BWPD (including salt water and RCRA exempt oil and gas waste) into its Champion Well No. 1D, with a maximum injection pressure of 1,450 psi. After hearing the protestants' concerns about increased truck traffic on Hayden Road, Bishop amended its request to dispose of a maximum of 3,000 BWPD.

There are three wellbores within a ¼ mile radius of the Champion No. 1D. The Kate Glass No. 1D was drilled in 1967 to a total depth of approximately 2,750 feet. The well did not penetrate the disposal interval and was plugged in 1967. The Champion No. 1 is an active oil well operated by Bishop. The Champion No. 1 produces from a Yegua reservoir at approximately 6,160 feet. The well is properly cased and cemented to protect usable quality water. The third well within ¼ mile is the Champion Realty No. 1 which was drilled in 1983 and plugged as a dry hole. The well is plugged in a manner which will protect usable quality water and will not provide a conduit for migration of fluids out of the disposal interval.

On April 29, 2009, Bishop performed a mechanical integrity test on the Champion No. 1D. The tubing-casing annulus was pressured to 500 psig and held for one hour with no leakage. The test confirmed no leaking in the production casing, tubing or packer. This test was witnessed by Commission personnel.

Within a 25 mile radius of the Champion No. 1D, there are six commercial disposal wells, none of which are in Montgomery County. Bishop presented deposition testimony of three water haulers in the area who would preferentially use the Champion No. 1D over other wells further away. Mr. Russell Roberts owns C & R Trucking, Inc. and testified that use of the Champion No. 1D would save his truckers 40 miles one way, compared to the facility he currently uses. He has also experienced wait times of up to 3 hours at other facilities. Mr. Bobby Cassity is the owner of C & C Transport, Inc. Mr. Cassity's trucks typically haul water from the Conroe and Cleveland area all the way to Anahuac or Daisetta for disposal. The Champion No. 1D would save 70-80 miles roundtrip for his trucks. Mr. Mac Forbes is the manager of Oil Patch Transportation, Inc. In his deposition, Mr. Forbes testified that using the Champion No. 1D would save over 100 miles one way from the disposal well his company currently uses.

Bishop presented evidence regarding a traffic study conducted in the area of the well. The entrance to Bishop's property is at the end of Hayden Road, which is a county road which extends approximately ¼ mile off FM 2090. Hayden Road is approximately 18 feet wide at its widest. The study results show that a total of 8 vehicles traveled on Hayden Road during peak morning and evening times. If 3,000 BWPD are hauled down Hayden Road to the facility, approximately 24 round trips would occur on Hayden Road. The required sight distance for a truck to make the turn from Hayden Road onto FM 2090 is 930 feet. The actual available sight distance at the intersection is 1,200 to 1,500 feet.

Travis L. Bishop has a current Form P-5 and maintains a \$25,000 letter of credit for financial assurance as required by the Commission.

On August 20, 2009, notice of the application was sent to the 64 surface owners adjacent to the 345 acre tract and to the Montgomery County Clerk. Bishop is the only operator within ½ mile of the well. Notice of the application was published in the *Conroe Courier*, a newspaper of general circulation in Montgomery County, on August 24, 2009. On October 30, 2009, an amended application was sent to the 64 surface owners, the Montgomery County Clerk, the Mayor of Splendora, and several other interested parties who had written letters of protest. This amended application correctly reflected that the well is one mile northwest of Splendora. The original application sent to the adjacent owners and County Clerk incorrectly stated that the well was one mile southwest of Splendora. The amended application was published in the *Conroe Courier* on November 1, 2009.

Protestants' Concerns

Mr. Robert Smith made a statement on behalf of Montgomery County Precinct 4. The concerns relate to 1) the increased traffic on the narrow Hayden Road resulting from the disposal well operations 2) the affect the disposal operations may have on drinking water sources 3) the possibility of spills from the site which may reach Peach Creek and 4) the close proximity of the disposal operations to a residential area.

Mr. Rusty Nezat is a resident of Hayden Road. Mr. Nezat is concerned about 1) the well's mechanical integrity due to its age 2) the possibility that hazardous waste will be disposed into the well and 3) the negative impact on quality of life for residents of Hayden Road.

Mr. Robert Schmidt appeared representing the City of Splendora. The City has four water supply wells, ranging in depth from 280 feet to 1,365 feet. The city is concerned that operations related to disposal into the Champion No. 1D will contaminate it's water supply. All four wells are within approximately one mile of the Champion No. 1D. The City requests that any permit granted for the well require additional safeguards, including a monitoring well and a cement bond log to verify cementing in the well.

EXAMINERS' OPINION

The examiners recommend that the application for commercial disposal authority be approved, including a requirement that Bishop run a cement bond log on the well to verify the presence of at least 100 feet of 80% bond immediately above the disposal zone. Bishop had no objection to this additional requirement.

The current permit for the well already requires an annual annulus pressure test to verify the integrity of the casing. With the mechanical configuration of the well and the presence of a thick shale interval above the disposal zones, injected fluids will be confined to the permitted interval between 2,900 feet and 3,000 feet. Additionally, there are no wellbores in the area of review which would provide a conduit for migration of injected fluids out of the permitted interval.

The calculated top of cement behind the longstring casing after the squeeze at 2,900 feet is approximately 2,400 feet. Because calculated cement tops are not always accurate, and in this case, the disposal interval is only 550 feet below the base of usable quality water, it is recommended that a cement bond log be run to verify that at least 100 feet of good quality cement (at least 80%) is present immediately above the disposal interval.

The well must also have an annual annulus pressure test similar to the test performed in April 2009. This testing will insure the mechanical integrity of the casing, tubing and packer. Monitoring the casing-tubing annulus pressure on a weekly basis will disclose quickly whether mechanical integrity has been compromised. With these additional requirements in the permit, the examiners do not believe that a monitoring well, as requested by the City, is necessary.

Approval of the application is in the public interest. Bishop has shown the proposed disposal well is necessary to provide another option for disposal of produced water for various water hauling companies who currently travel much longer distances to dispose of water. Less travel time and miles results in reduced costs to operators.

The examiners recognize that Hayden Road is not adequately wide to provide the passage of two trucks, unless one truck is off the pavement. However, with the reduction in the volume to be disposed of, passing of trucks on this short road should be very rare. Access from Hayden Road onto FM 2090 has been studied and the sight distance in both directions from Hayden Road is sufficient to allow trucks to safely turn onto FM 2090.

FINDINGS OF FACT

1. On October 30, 2009, an amended application was sent to the 64 surface owners adjacent to the tract, the Montgomery County Clerk, the Mayor of Splendora, and several other interested parties who had written letters of protest. The amended application was published in the *Conroe Courier* on November 1, 2009. The original application sent to the persons entitled to notice incorrectly stated the location of the well.
2. The Champion No. 1D has a current permit for disposal.
 - a. On August 8, 1985, Sue Ann Oil & Gas Company was issued a permit to dispose of a maximum of 500 BWPD in the Champion No. 1D between 2,900 and 3,000 feet, with a maximum surface injection pressure of 500 psig.
 - b. On July 5, 1993, the permit was amended to increase the volume to 1,000 BWPD and the maximum surface injection pressure to 1,250 psig.
 - c. Current perforation in the well are from 2,940-2,950 feet.
3. Approximately 3 years ago, Travis L. Bishop purchased 345 acre on which the well is located. There is also one producing well on the tract.

4. The Champion No. 1D is completed in a manner which will not endanger any oil, gas or other mineral formation and will not cause the pollution of usable quality water.
 - a. The Texas Commission on Environmental Quality recommends protection of usable quality water resources to a depth of 2,350 feet in the Champion No. 1D.
 - b. The Champion No. 1D was drilled in 1957 to a total depth of 10,700 feet and initially produced from a depth of approximately 7,050 feet.
 - c. The well has 1,987 feet of 9 5/8" surface casing cemented to surface and 5 1/2" casing set to 7,221 feet.
 - d. A cement squeeze was performed above the disposal interval at 2,900 feet, and below the disposal interval at 3,026 feet. The production casing was also perforated at 2,060 feet and cement was squeezed at that depth. A cement plug is set at 3,020 feet to isolate the lower portion of the wellbore.
 - e. The calculated top of cement behind the longstring is approximately 2,400 feet.
5. A cement bond log is necessary to verify that at least 100 feet of 80% bonded cement is present behind the longstring immediately above the disposal interval.
6. An annual annulus pressure test and weekly monitoring of the casing-tubing annulus is necessary to verify the mechanical integrity of the well because there is a section of usable quality water which is behind uncemented casing.
7. Use of the Champion No. 1 as a commercial disposal well is in the public interest because it will serve to reduce hauling distances and costs for operators in the area.
8. Travis L. Bishop has a current Form P-5 and maintains a \$25,000 letter of credit for financial assurance as required by the Commission.

CONCLUSIONS OF LAW

1. Proper notice was issued in accordance with the applicable statutory and regulatory requirements.
2. All things necessary to give the Railroad Commission jurisdiction to consider this matter have occurred.
3. Travis L. Bishop has met its burden of proof and its application satisfies the requirements of Chapter 27 of the Texas Water Code and the Railroad Commission's Statewide Rule 9.

4. The use of the proposed disposal well will not endanger oil, gas, or geothermal resources or cause the pollution of usable quality water resources.
5. The use of the proposed disposal well is in the public interest pursuant to Sec 27.051 of the Texas Water Code.

EXAMINERS' RECOMMENDATION

Based on the above findings and conclusions, the examiners recommend that the application of Travis L. Bishop for commercial disposal authority for its Champion No. 1 be approved as set out in the attached Final Order, limiting disposal to 3,000 BWPD and requiring a cement bong log.

Respectfully submitted,



Donna K. Chandler
Technical Examiner



Marshall F. Enquist
Hearings Examiner